CLAIMS

1. A device for examining human and animal body cavities, the device comprising

- a catheter (1) with a proximal end (A) and a closed distal end (B) for inserting into the human or animal body cavity, the catheter having a lumen extending from the proximal end into the catheter,

- a signal generator (2) for generating an excitation signal,

- a transmitting transducer (3) coupled to receive the excitation signal and arranged to transmit, in response to the excitation signal, a corresponding acoustic signal into the lumen of the catheter,

- a receiving transducer (5) arranged to receive reflections of the acoustic signal from the lumen of the catheter,

- a pressure transducer (42) sensitive to low frequencies and arranged to sense, when inserted into the body cavity, the pressure in the lumen of the catheter and outputting a signal representing low-frequency pressure variations, and

- a signal processing device (4, 6) for receiving and analysing the output signals from the receiving transducer (5) and the pressure transducer (42).

2. A device according to claim 1 wherein the excitation signal comprises an impulse signal of duration short enough to make the corresponding reflected signal distinguishable from the excitation signal.

3. A device according to claim 1, where the pressure transducer (42) is sensitive to frequencies up to at least 10 Hz, preferably up to at least 100 Hz.

4. A method for obtaining dynamic data of the conditions in a human or animal body cavity, the method comprising

- transmitting an acoustic impulse signal into the body cavity,

- receiving reflections of the acoustic impulse signal from the body cavity,

- obtaining data of low frequency pressure changes in the body cavity, and

- analysing the received reflections and the data of low frequency pressure changes to obtain information on the body cavity.

5. A method according to claim 4 comprising transmitting the data obtained to a signal processing device for simultaneous processing.

6. A method according to claim 4, wherein the analysis of the received reflections and of the data of low frequency pressure changes are used to provide corresponding area and pressure representations.